

Title (en)

PROCESS FOR DYEING POLYACRYLONITRILE TEXTILE MATERIAL

Publication

**EP 0099030 B1 19880302 (DE)**

Application

**EP 83106414 A 19830701**

Priority

DE 3225877 A 19820710

Abstract (en)

[origin: US4488879A] This invention relates to dyeing textile materials of polyacrylonitrile or copolymers containing acrylonitrile in polymerized form with basic dyestuffs in aqueous dyeing liquors using the exhaust method employing retarders. The retarders are obtained by condensing (a) piperazine and piperazine derivatives with (b) ethylene chloride, epihalohydrin, propylene chloride, 1,3-dichloro-2-hydroxypropane, bis-epoxybutane, 1,4-dichlorobutene or their mixtures in mole ratios of 1:0.9 to 1:1.1. The condensation products are then quaternized with benzyl chloride using 0.8 to 1.5 moles of benzyl chloride per mole of component (a) for the quaternization. The aqueous solutions of the retarders either do not foam or show a very low foaming tendency.

IPC 1-7

**D06P 3/76; D06P 1/52; D06P 1/66**

IPC 8 full level

**D06P 1/52** (2006.01); **D06P 1/66** (2006.01); **D06P 3/76** (2006.01)

CPC (source: EP US)

**D06P 1/5264** (2013.01 - EP US); **D06P 3/76** (2013.01 - EP US); **Y10S 8/927** (2013.01 - US)

Citation (examination)

- Datenblatt der BASF, D 216, Ausgabe July 1970
- BASF-Zwischenprodukte, Ausgabe März 1980, S.278

Cited by

EP0209787A3; EP0160878A3; EP0160879A3

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

**EP 0099030 A2 19840125; EP 0099030 A3 19860122; EP 0099030 B1 19880302;** AT E32758 T1 19880315; DE 3225877 A1 19840112;  
DE 3375808 D1 19880407; US 4488879 A 19841218

DOCDB simple family (application)

**EP 83106414 A 19830701;** AT 83106414 T 19830701; DE 3225877 A 19820710; DE 3375808 T 19830701; US 51056483 A 19830705